REMARKS

Amendment: This is the filing of a request for continuing examination (RCE) with a preliminary amendment under 37 CFR 1.115 responsive to the office action dated Aug 14, 2007.

Telephone interview with Examiner Deppe: In a telephone conversation with Examiner Deppe on Oct 4, 2007, Agent Chesavage proposed correcting an error in figure 5 by moving increment step 172 to before correction calculation steps 168 and 170, which would result in agreement with figure 6 and the specification, and Examiner Deppe agreed that this change would be acceptable. Such change is incorporated into amended figure 5, the amended specification of page 12 line 7, and claims 20 and 33.

Drawing: Applicant has provided an amended figure 5 filed under 37 CFR 1.121, which is labeled as a replacement sheet, and includes a redlined "Annotated sheet" to show changes compared to the originally filed figure 5.

Specification:

With regard to the drawing objection of figure 5 for the previous drawing amendment showing k=1, applicant has changed the initialization of k back to k=0 in step 162, as was originally filed. In order for figure 5 to agree with figure 6, the incrementing step 172 is shown prior to the application of gain control in steps 168 and 170, and the specification is amended to show the value of the gain change to be 2^{n-k-1} where "substantially half of the initial gain correction value (2^{n-1}-1 of step 162) is added or subtracted". Drawing figure 5 as filed had an error in the placement of step 172 which was inconsistent with figure 6 and the specification, which declares on page 12 line 23 "The amount of gain control change in each iteration is 2^{n-k-1}, corresponding to **roughly half of each gain control step**". For example, step 202 of figure 6 shows the case for n=7 with the addition/subtraction of the correction value 10000 (2^4), which is substantially half of the initial value 0111111(2^6-1)computed from 2^{n-k-1} where n=7, k=1. Figure 5 as filed is not in agreement with figure 6 and the specification, which shows the halving of correction value on the first, and each successive iteration.

With regard to the inconsistency between figure 5 steps 168/170 which shows $2^{(n-k-1)}$ and the specification page 12 line 24 which shows $2^{(n-k-1)}$-1, the specification page 12 line 24 is amended to $2^{(n-k-1)}$, in agreement with the drawing and description of operation of figure 6.

With regard to the claim objection of claim 1 line 5 --having-- is changed to "including".

With regard to the claim objection of claim 1 lines 7-10 and 13-25, applicant has provided distinguishing levels of indenting for structure related to the digital gain controller.

With regard to claim 10 lines 9-10 and claim 19 line 2, applicant has changed --m times-- to "m iterations".

With regard to claim 12 superscript (n-1), applicant has amended the claim to match the specification as suggested by the examiner.

With regard to claim 16 lines 3-5, claim 24 lines 3-5, claim 29 lines 3-5, claim 34 lines 3-6, claim 39 lines 3-6, applicant changes --having a first value during...following said first interval-- to "wherein the iteration time during a first interval is shorter than the iteration time during a second interval and wherein the second interval follows said first interval" as suggested by the examiner.

With regard to claims 21-27, --where-- is changed to "wherein".

With regard to claim 27, --said m times occurs-- is changed to "said first through fourth steps occur".

With regard to claim 28, --having-- is changed to "including".

With regard to claim 28, lines 18-29 are indented to more clearly identify the structure as part of the digital gain controller.

With regard to claim 28 line 28 line 27, --said-- is deleted which references a new correction value formed from a previous correction value.

With regard to claim 33 line 17, --each-- is changed to "each of".

With regard to claim 34-37, --where-- is changed to "wherein".

With regard to claim 37, --said m times occurs-- is amended to "said first through fourth steps occur".

With regard to claim 39-42, --where-- is changed to "wherein".

With regard to the 35 USC 112 rejection of claim 28, applicant appreciates examiner's suggestion, however claim 28 is intended to be drawn to a single gain controller 274 which generates gain control voltages 282 and 268 in response to a single multiplexed stream of inphase data 258 and quadrature data 260. Applicant has amended claim 28 to clarify "two instances of the same function", where the computation of a digital gain value is performed by a "single hardware function" which operates successively on a stream of multiplexed quadrature data.

With regard to the dependent claims 29-32, these claims are allowable as relying on allowable independent claim 28.

With this amendment, the claims of the present amendment are in condition for allowance. Please direct all correspondence to the Attorney of Record:

Jay Chesavage
650-619-5270
3833 Middlefield Rd.
Palo Alto, Ca. 94303
PTO Reg No 39,137
PTO Customer Number 24346.

Respectfully Submitted,

Jay Chesavage
Registration No. 39,137

— ANNOTATED SHEET —

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Figure 4

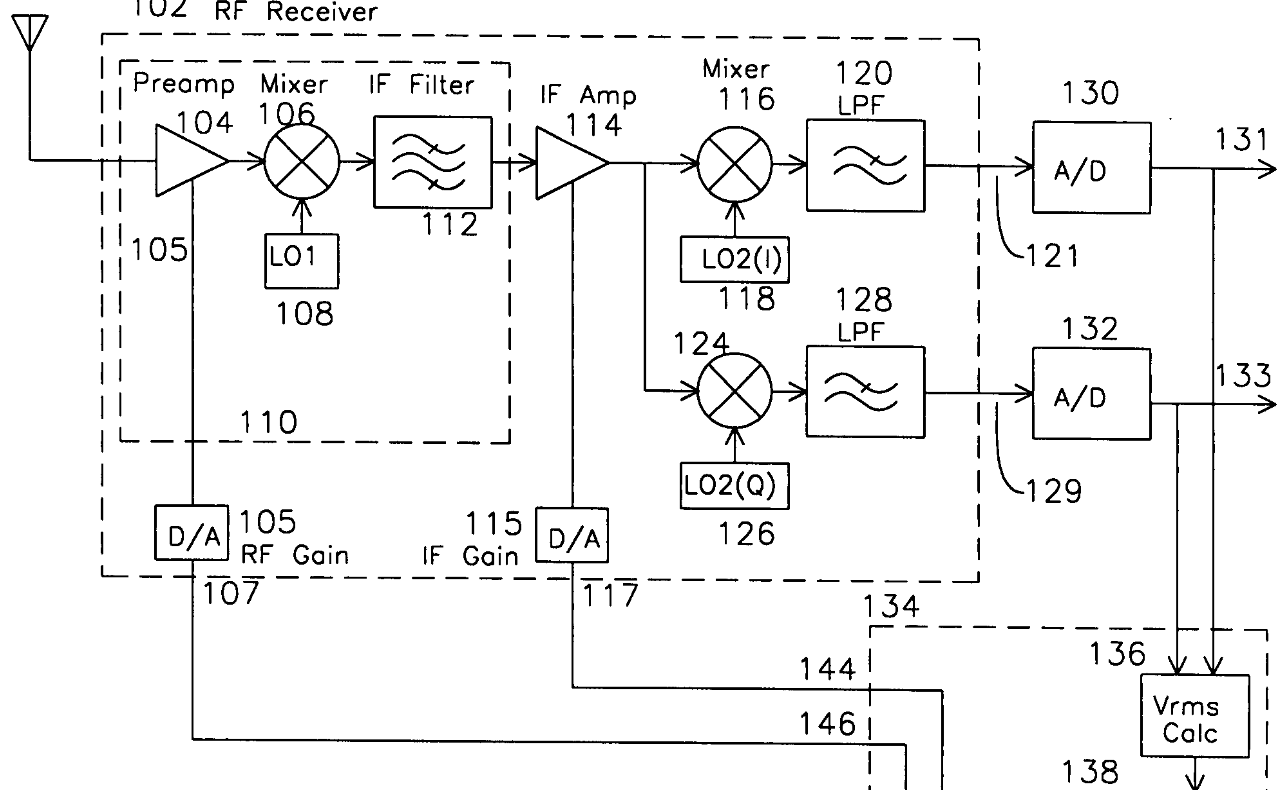

Figure 5